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MULTICRITERIAL ANALYSIS OF ENVIRONMENTAL IMPACTS IN THERMOELECTRIC POWER STATION AREAS

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Abstract

The paper represents the application of a multicriterial analysis for establishing the decisional priorities in the field of impacts generated by polluting emissions from large burning installations. The analytic hierarchy process (AHP) method was used in order to express quantitatively how the environmental protection and sustainable development objectives are met. Based on experimental determinations carried out on site at Mintia Power Station, Romania and the brainstorming sessions held with people appointed to take decisions in the area, the criteria required to make a hierarchy of environmental protection measures were appointed. In order to verify the accuracy and coherence of the results, a numerical analysis software, which operates with matrix calculus was used. The range of the results obtained is within the limits established by Saaty for the consistency report. The conclusions drawn are in complete accordance with the EUROPA 2020 Strategy.

Key words: analytic hierarchy process, multicriterial analysis, polluting emissions, thermoelectric power stations

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